

#### AMENDMENTS TO THE CLAIMS

In the claims, please amend claims 5, 7, and 12 as follows.

- 1-4. (canceled)
5. (currently amended) A process for delivering a polynucleotide to the cytoplasm of a cell in vitro comprising consisting essentially of:
- a) forming a styrene-maleic anhydride-based random copolymer;
  - b) covalently linking hydrophobic groups to anhydride monomers in the copolymer thereby forming a membrane active polymer capable of lysing mammalian cell membranes at pH 6.5; and,
  - c) contacting said cell with said polynucleotide and said membrane active polymer such that the compound and the polymer are endocytosed by the cell.
6. (canceled)
7. (currently amended) The process of claim [[1]] 5 wherein the hydrophobic groups are selected from the list consisting of: hydrophobic esters and hydrophobic amides.
8. (previously presented) The process of claim 7 wherein a functional group is covalently linked to an anhydride monomer in the polymer.
- 9-11. (canceled)
12. (currently amended) A process for delivering a polynucleotide to the cytoplasm of a cell in vitro comprising consisting essentially of:
- a) forming a vinyl ether-maleic anhydride-based alternating copolymer;
  - b) covalently linking hydrophobic groups to anhydride monomers in the copolymer thereby forming a membrane active polymer capable of lysing mammalian cell membranes at pH 6.5; and,
  - c) contacting said cell with said polynucleotide and said membrane active polymer such that the compound and the polymer are endocytosed by the cell.
13. (previously presented) The process of claim 12 wherein the vinyl ether is selected from the group comprising alkyl vinyl ether and aryl vinyl ether.
14. (previously presented) The process of claim 13 wherein the alkyl vinyl ether is selected from the group consisting of: propyl vinyl ether and butyl vinyl ether.
15. (canceled)
16. (previously presented) The process of claim 12 wherein the hydrophobic groups are selected from the group consisting of: hydrophobic esters and hydrophobic amides.

17. (previously presented) The process of claim 12 wherein a functional group is covalently linked to an anhydride monomer in the polymer.

18-20. (canceled)